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Abstract

MANAGEMENT OF RADIOACTIVE WASTES AT TROMBAY

R.V. Amalraj, A.R. Chinoy, J.D. Sehgal and K.T. Thomas

Atomic Energy Establishment Trombay

The Atomic Energy Establishment Trombay houses both industrial and research set-ups including such diverse facilities as production units for uranium, thorium and plutonium, fuel element fabrication shop, laboratories and research reactors. The radioactive wastes produced from such a centre will vary widely over a spectrum of activity levels and chemical nature. In this paper the magnitude of the problem is presented and the manner in which it has been solved or is proposed to be solved is dealth with.

The paper stresses the strict limits put on the discharge of radioactivity at Trombay due to the low water renewal rate of Bombay Harbour Bay, the existence of fishing and salt production industries dependent on the bay waters, the nearness of the centre to the City of Bombay and the high water table and heavy monsoon rains in the area.

Various factors were considered for evolving a suitable waste management philosophy at Trombay. Details of these considerations and short descriptions of existing and proposed waste treatment plants and facilities including methods of handling radioactive sludges and management of high level wastes from the fuel reprocessing plant are given.

Research work being carried out for improvement of present techniques and development of new methods of treatment and disposal is summarised.